



Geostationary Operational Environmental Satellite (GOES)-R Series

Industry Day Brief

NOAA Satellites and Information Service

December 13, 2004

Approved for Public Release



Purpose



- The purpose of the Industry Day briefing is to provide information to industry regarding the upcoming Request For Proposal (RFP) for the GOES-R Program Definition and Risk Reduction (PDRR) contract(s)



Rules of Engagement – Part 1



- The only source for official information regarding GOES-R system acquisitions is our website at <http://osd.goes.noaa.gov>
- These charts serve as the official record of this industry day event
- Answers to questions and other spoken information are informal and unofficial
- Any official communications resulting from this industry day will be posted on our website



Industry Day Agenda



Admin and Agenda	J. Inman	1:00 – 1:05
Welcome and Introduction	J. Kelly , BGEN USAF, Ret DUS/Commerce G. Withee AA, NOAA Satellite & Information Services E. Weiler Goddard Space Flight Center Director	1:05 – 1:30
Rules of Engagement	J. Inman	1:30 – 1:45
GOES R Program Overview	S. Kirkner	1:45 – 2:00
Instrument Acquisition Status	M. Donnelly	2:00 – 2:15
Acquisition Strategy	M. Crison	2:15 – 3:30
Next Steps	J. Inman	3:30 – 3:45
Closing Remarks	M. Crison	3:45 – 4:00



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E. Weiler | 1:05 – 1:30 |
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Your White Papers



- Our industry announcement asked for white papers of up to four pages with your thoughts and recommendations on a GOES-R acquisition strategy approach
- We will continue to review them, and we reserve the right to contact any paper's author when that source's paper provides ideas that we want to explore further



Your White Papers (Cont.)



- The acquisition strategy is currently being formalized
 - The draft GPRD, MRD, CONOPS, and SOO are being released today
 - We anticipate additional documents released by December 30, 2004 and a full draft RFP the end of January 2005
 - This and additional information will be posted on our website



Questions Regarding the GOES-R PDRR and A&O Acquisitions



- All questions or comments from industry sources regarding the GOES-R PDRR and A&O acquisitions should be directed to the acting NOAA GOES-R contracting officer:
john.inman@noaa.gov
- All industry offers of briefings, background information, capability demonstrations, courtesy calls, and so forth should be directed to the NOAA GOES-R contracting officer
- We intend to act with fairness, and the above are essential for fairness—a potential offeror who circumvents the contracting officer may obtain incorrect information



Industry Feedback



- The Government invites industry comments on the GPRD, MRD, SOO, and CONOPS
- All these documents are available on the GOES-R website
- Comments should be written to help the Government craft documents that best explain our requirements, maximize industry flexibility, and effect an efficient source selection
- Comments should be submitted electronically to the contracting officer



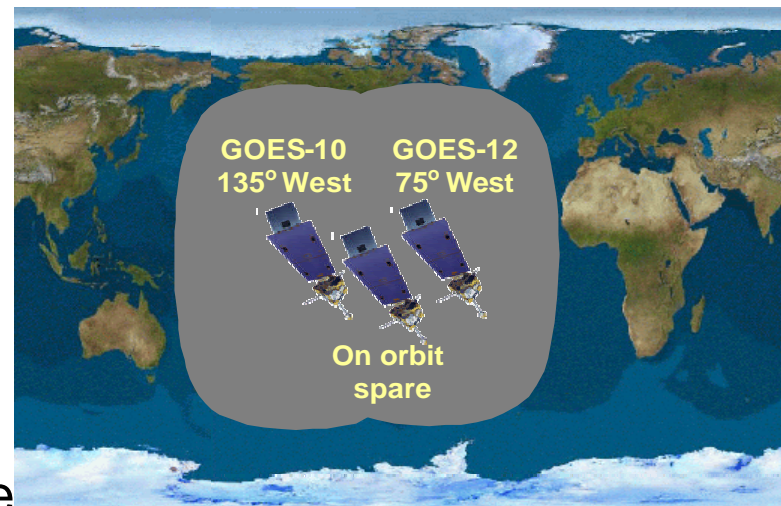
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GOES Mission Overview

- Satisfies National operational environmental requirements for 24-hour observation of weather, earth's environment, and solar & space environment
 - Supports all NOAA Mission Goals
- GOES continuously maintains operational satellites at two locations (75° West and 135° West)
 - On-orbit spare ready in case of failure
- GOES-I Series current operational series
- GOES-N Series under contract
- GOES-R Series is the follow-on program to GOES-N Series



Integrated end-to-end system to achieve NOAA Goals



NOAA's Strategic Mission Goals Benefiting the Nation



Ecosystem

- Determine environmental impacts of chaotic processes, i.e. diurnal ocean color as a function of tides



Climate

- Provide diurnal signature for weather and climate prediction and analysis



Weather & Water

- Real time weather data to accurately track and analyze severe weather events

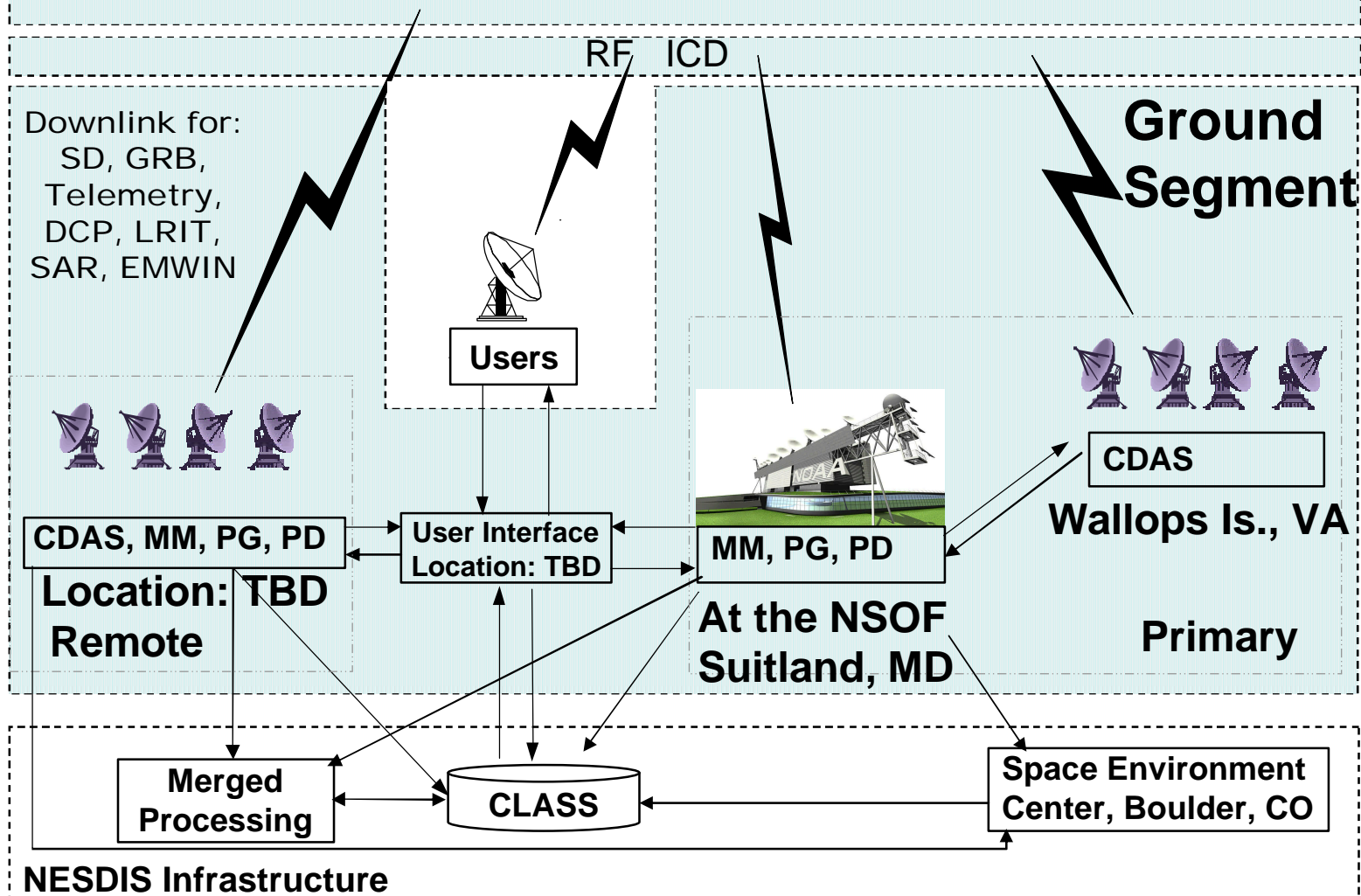


Commerce & Transportation

- Uninterrupted hemispheric observations and products for safe and efficient transportation and commerce systems

System Scope

GOES R Constellation



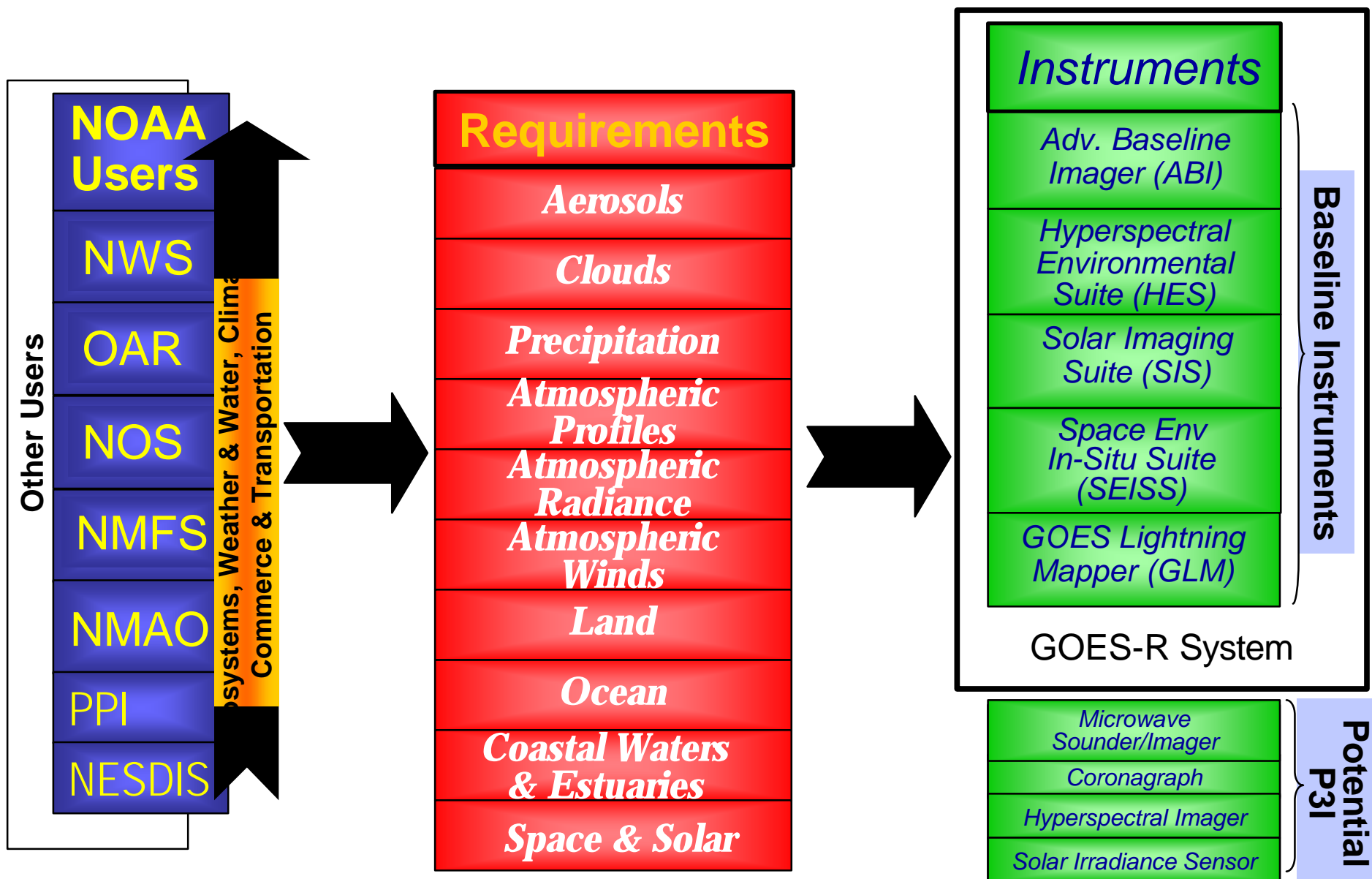


Requirements

- Ensure Extensive User Involvement
 - GOES User Conferences—2001, 2002, and 2004
 - Data User Conference—2002, 2004
 - Participation in architecture and performance/cost trades
- Collect, Document, And Validate User Requirements
 - GOES-R Program Requirements Document (GPRD)
 - Incorporates all NOAA Line Office and Mission Goal Team Requirements
 - Contains baseline requirements and opportunities for future enhancements – Pre-Planned Product Improvements (P3I)
- Translate Operational Requirements Into System Acquisition Requirements - Mission Requirements Document (MRD)



Mapping Requirements To System Solutions





GOES-R Observational Requirements



Aerosol Detection	Dust/Aerosol		Surface Albedo	
Aerosol Particle Size	Probability of Rainfall		Surface Emissivity	
Suspended Matter	Rainfall Potential		Vegetation Fraction	
Volcanic Ash	Rainfall Rate		Vegetation Index	
Aircraft Icing Threat	Atmospheric Vertical Moisture Profile		Currents	
Cloud Imagery	Atmospheric Vertical Temperature Profile		Ocean Color	
Cloud & Moisture Imagery	Capping Inversion Information		Ocean Optical Properties	
Cloud Base Height	Derived Stability Indices		Ocean Turbidity	
Cloud Layers / Heights & Thickness	Moisture Flux		Sea & Lake Ice / Displacement & Direction	
Cloud Ice Water Path	Pressure Profile		Sea & Lake Ice / Age	
Cloud Liquid Water	Total Precipitable Water		Sea & Lake Ice / Concentration	
Cloud Optical Depth	Total Water Content		Sea & Lake Ice / Extent & Characterization	
Cloud Particle Size Distribution	Clear Sky Masks		Sea & Lake Ice / Extent & Edge	
Cloud Top Phase	Radiances		Sea & Lake Ice / Surface Temp	
Cloud Top Height	Absorbed Shortwave Radiation		Sea & Lake Ice / Motion	
Cloud Top Pressure	Downward Longwave Radiation		Sea & Lake Ice / Thickness	
Cloud Top Temperature	Downward Solar Insolation		Ice Cover / Landlocked	
Cloud Type	Reflected Solar Insolation		Snow Cover	
Convection Initiation	Upward Longwave Radiation		Snow Depth	
Enhanced "V"/Overshooting Top Detection	CO Concentration		Sea Surface Temps	
Hurricane Intensity	Ozone Total		Energetic Heavy Ions	
Imagery: All-Weather / Day - Night	SO ₂ Detection		Mag Electrons & Protons: Low Energy	
Lightning Detection	Derived Motion Winds		Mag Electrons & Protons: Med & High Energy	
Low Cloud & Fog	Microburst Wind Speed Potential		Solar & Galactic Protons	
Turbulence	Fire / Hot Spot Imagery		Solar Flux: EUV	
Visibility	Flood / Standing Water		Solar Flux: X-Ray	
Geomagnetic Field	Land Surface (Skin) Temperature		Solar Imagery: X-Ray	

ABI – Advanced
Baseline Imager

HES – Hyperspectral
Environmental Suite

SEISS – Space Env.
In-Situ Suite

SIS – Solar
Instrument Suite

GLM – GOES
Lightning Mapper

Magnetometer



System Improvement Highlights



- Simultaneous Hemisphere/Mesoscale Coverage
 - Southern Hemispheric coverage retained during Mesoscale
- Timeliness
 - Improved refresh rates and data latency
- Instrument Performance
 - Improved spatial resolution and spectral response
- Mission Continuity
 - 10 year design life per spacecraft



Instrument Improvement Highlights



GOES-N Instruments	GOES-R Notional Baseline
Imager 5 Channels	Advanced Baseline Imager (ABI) 16 Channels
Multispectral Sounder 18 Channel	Hyperspectral Environmental Suite (HES) 1500 Channel Sounder 14 Channel Imager
Solar X Ray Imager Space Environmental Monitor	Solar Imaging Suite (SIS) (Dynamic Range, Resolution, Sensitivity) Space Environmental In-Situ Suite (SEISS) (Radiation Environmental Response Times)
N/A	Geostationary Lightning Mapper (GLM)



Ground Improvement Highlights



	GOES-N	GOES-R
Sensor Data Processing	2.1 Mb Downlink	>120 Mb Downlink
Products	41	~160
Redundancy	CDA (Wallops Island, VA SOCC/PG (Suitland, MD) CDA B/U GSFC (Greenbelt, MD)	CDA (Wallops Island, VA MM/PG/PD (Suitland, MD) MM/PG/PD/CDAS (Site TBD)
Operational Efficiency	—	Increased automation



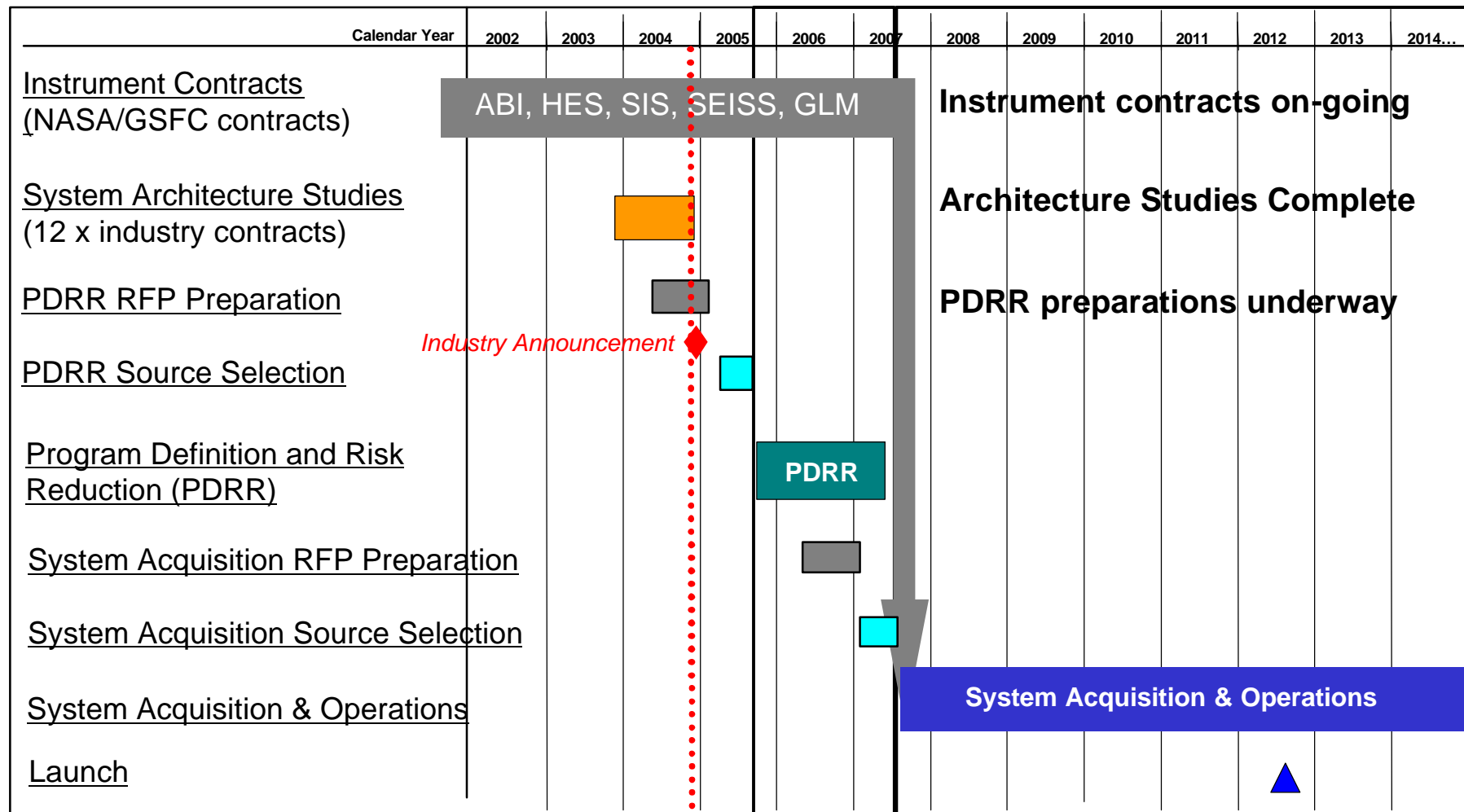
Services



- GOES-R Re-Broadcast (GRB)
 - Processed data, weather info rebroadcast to users
- Auxiliary Payload Services
 - Direct Communication Services (DCS)
 - Emergency Managers Weather Information Network (EMWIN)
 - Low Rate Information Transmission (LRIT)
 - Search and Rescue Satellite Aided Tracking (SARSAT)
 - NOAA Marine and Aviation Operations (NMAO) Aircraft and Ship Service



GOES-R Master Schedule





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Advanced Baseline Imager Status



- Implementation Contractor
 - ITT Industries, Fort Wayne, IN
- Key Technologies
 - Focal Plane Arrays
 - Cryo-cooler(s)
 - Light Weight Optical Assemblies
- Risk Areas
 - Focal Plane Development
 - Image Navigation and Registration
 - Thermally Induced Optical Distortion



Advanced Baseline Imager Schedule



- Formulation Complete
 - Timeframe 5/01 – 1/04
- Implementation Major Milestones
 - Contract Award – 9/04
 - Initial Baseline Review – 12/04
 - Systems Requirements Review – 02/05
 - PDR – 07/05 (TBD)
 - CDR – 07/06
 - Complete Prototype Model – 03/07
 - Deliver FM #1 – 12/09



Hyperspectral Environmental Suite Status



- Contractor(s)
 - Three Design/Risk Reduction (Formulation) Phase Contracts
 - BAE Systems, Nashua, NH
 - BALL Aerospace & Technologies Corp, Boulder, CO
 - ITT Industries, Fort Wayne, IN
 - Period Of Performance: 24 Months
 - Firm Fixed Price Contract, \$20M/Each



Hyperspectral Environmental Suite Status (cont.)



- Key Technologies
 - Focal Plane Arrays
 - Cryo-Cooler
 - Metrology Laser
- Risk Areas
 - HES Acquisition on Critical Path for September 2012 launch



Hyperspectral Environmental Suite Schedule



- | • Formulation Major Milestones | Dates |
|---|-------------------------------------|
| – Formulation Kick-Off | 6/04 |
| – Progress Review #1 | 10/04 |
| – Initial Evaluation Review | 1/05 |
| – Progress Review #2 | 4/05 |
| – Mid Term Review | 7/05 |
| – Progress Review #3 | 10/05 |
| – Progress Review #4 | 1/06 |
| – Formulation Phase Concept and Cost Review | 4/06 |
| – Action Item Review | 6/06 |
| • Implementation Major Milestones | |
| – Expected Implementation Award Date | 1/07 |
| – PDR | Contract award plus 12 months (TBR) |



Solar Imaging Suite Status



- Contractor(s)
 - One Design/Risk Reduction (Formulation) Phase Contract
 - Lockheed Martin Advanced Technology Center, Palo Alto, CA
 - Period Of Performance: 18 Months
 - Firm Fixed Price Contract, \$6M



Solar Imaging Suite Status (cont.)



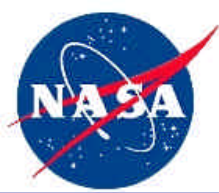
- Key Technologies
 - SXI: Anti-Blooming, Back Illuminated Detectors
 - SXI: Pointing Compensation
 - EUVS: Filters, 50 – 115 nm range
- Risk Areas
 - Single vendor for potential grazing incidence mirror for SXI



Solar Imaging Suite Schedule



- | • Formulation Major Milestones | Dates |
|---|------------------------------------|
| – Contract Award | 9/04 |
| – Formulation Kick-Off | 10/04 |
| – Progress Review #1 | 1/05 |
| – Mid Term Review | 4/05 |
| – Progress Review #2 | 7/05 |
| – Progress Review #3 | 11/05 |
| – Formulation Phase Concept and Cost Review | 2/06 |
| – Action Item Review | 3/06 |
| • Implementation Major Milestones | |
| – Expected Implementation Award Date | 10/06 |
| – PDR | Contract award plus 9 months (TBR) |



Space Environment In-Situ Suite Status



- Contractor(s)
 - Plan to award up to two Design/Risk Reduction (Formulation) Phase Contracts
 - Selection Announcement Imminent
 - Period Of Performance: 9 Months
 - Firm Fixed Price Contract, \$2M Each
- Key Technologies
 - Detectors: current GOES series surface barrier detectors exhibiting failures
- Risk Areas
 - None



Space Environment In-Situ Suite Schedule



- | Formulation Major Milestones | Dates |
|---|------------------------------------|
| – Start of Formulation | 1/05 |
| – Formulation Kick-Off | 1/05 |
| – Mid Term Review | 3/05 |
| – Progress Review #1 | 5/05 |
| – Formulation Phase Concept and Cost Review | 9/05 |
| – Action Item Review | 9/05 |
| Implementation Major Milestones | |
| – Expected Implementation Award Date | 3/06 |
| – PDR | Contract award plus 9 months (TBR) |



Geostationary Lightning Mapper Status



- Contractor(s)
 - N/A (Up to two, \$2M FP Contracts to be awarded)
- Key Technologies
 - Real Time Event Processing
 - Potential on Focal Plane Processing
- Risk Areas
 - Radiation Hardness and Lifetime



Geostationary Lightning Mapper Schedule



- Formulation Major Milestones
 - ASM 12/07/04
 - DRFP Release 12/15/04 (TBR)
 - RFP Release 01/05/05 (TBR)
 - Contract Award(s) 05/31/05
 - FPCCR 01/15/06
- Implementation Major Milestones
 - Expected Implementation Award – 9/06
 - PDR - contract award plus 9 months (TBR)



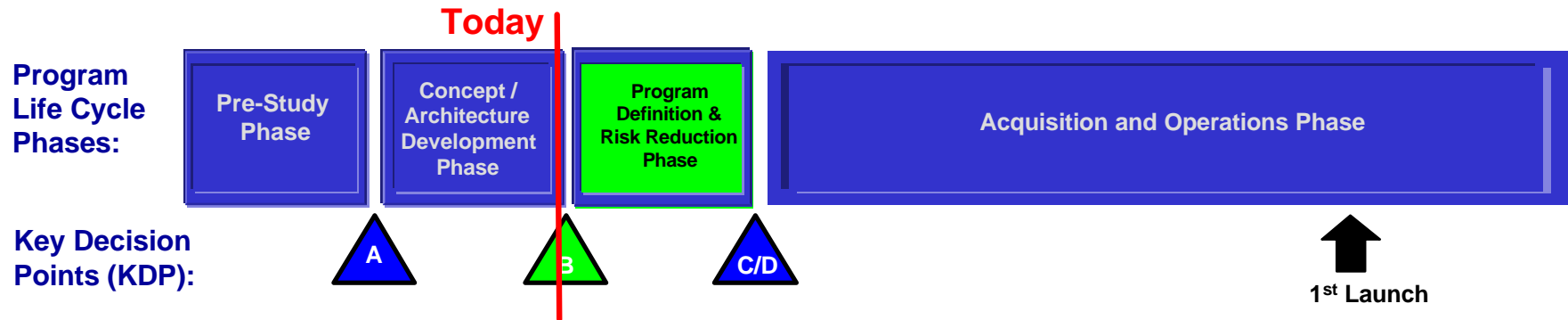
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Acquisition Program Overview



- NOAA has structured GOES-R phases – similar to NPOESS program
- NOAA finalizing acquisition plan for KDP B and System Program Definition and Risk Reduction (PDRR) phase
 - DOC Acquisition Review Board planned for end of Jan
 - RFP development based on single system prime contract approach
- NOAA developing acquisition plan for KDP C/D and Acquisition and Operations (A&O) phase



System Prime Acquisition Strategy



- Single system prime contract to develop and acquire system
 - Instrument efforts already planned/underway will be transitioned to system prime contract
- System prime strategy
 - Focuses system definition and development activities on the system as a whole – space and ground
 - Establishes clear lines of accountability and responsibility for system management and integration



Program Definition and Risk Reduction Phase Purpose



- Define system architecture to meet Government requirements
- Identify and manage system risks to maximize program success
- Prepare and plan for effective transition of instrument activities to system prime
- Accomplish System Requirements Review, System Concept Review and progress towards Preliminary Design Review



System Prime Contract Approach



- Baseline
 - PDRR – Award up to three prime contracts
 - Full and open competition for single A&O contract

System PDRR

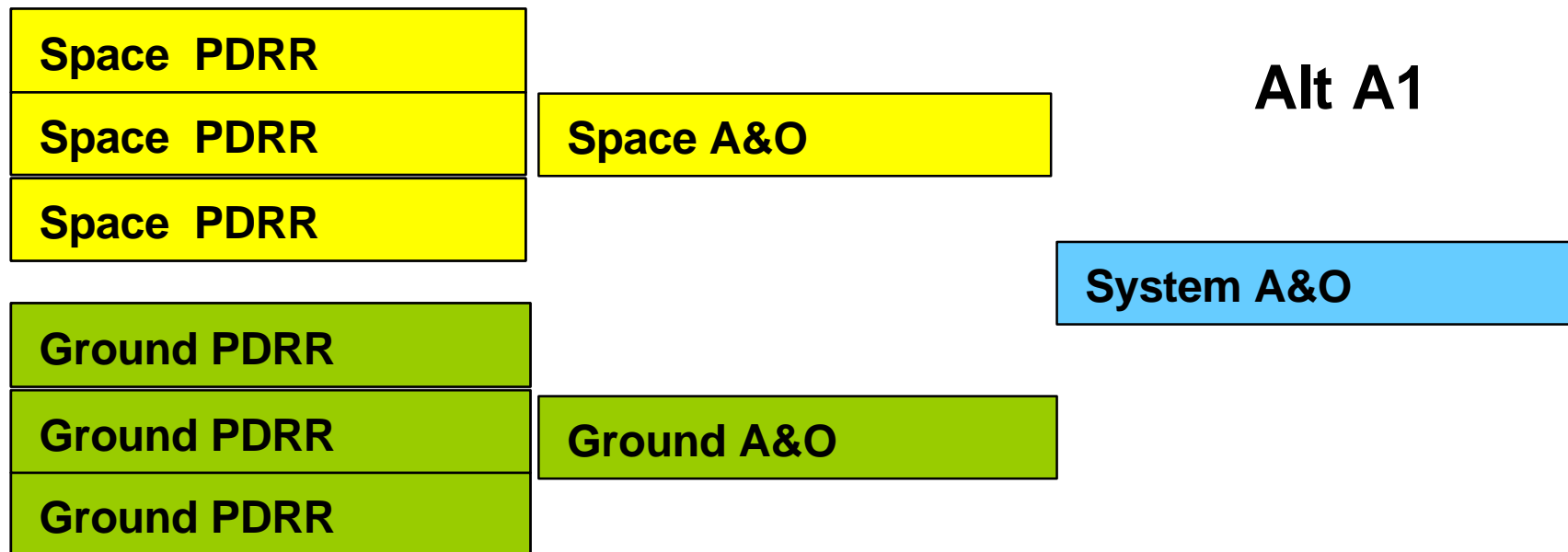
System PDRR

System PDRR

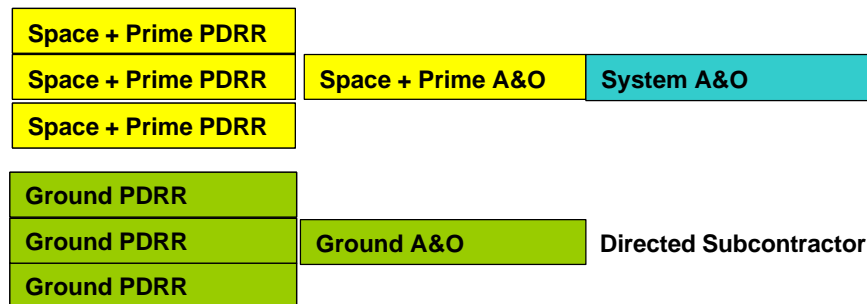
System A&O



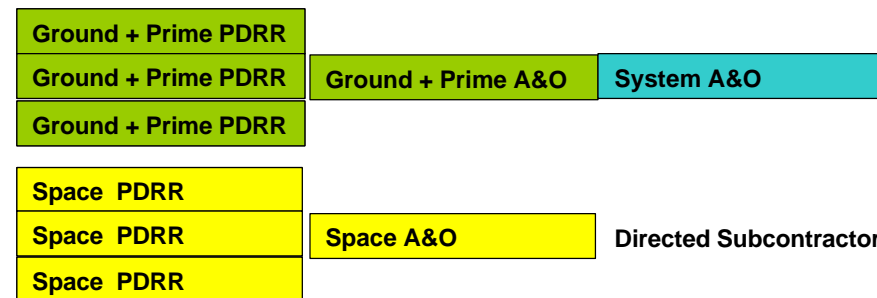
System Prime Implementation Alternatives



Alt A2



Alt A3





System Prime Implementation Alternatives (Cont.)



Alt B1

System PDRR
System PDRR
System PDRR

System A&O

△ Make/Buy review

Alt B2

System PDRR
System PDRR
System PDRR

System A&O

△ Make/Buy review



System Prime Implementation Alternatives (Cont.)



Alt C

Space PDRR

Space PDRR

Space PDRR

Ground PDRR

Ground PDRR

Ground PDRR

Prime PDRR

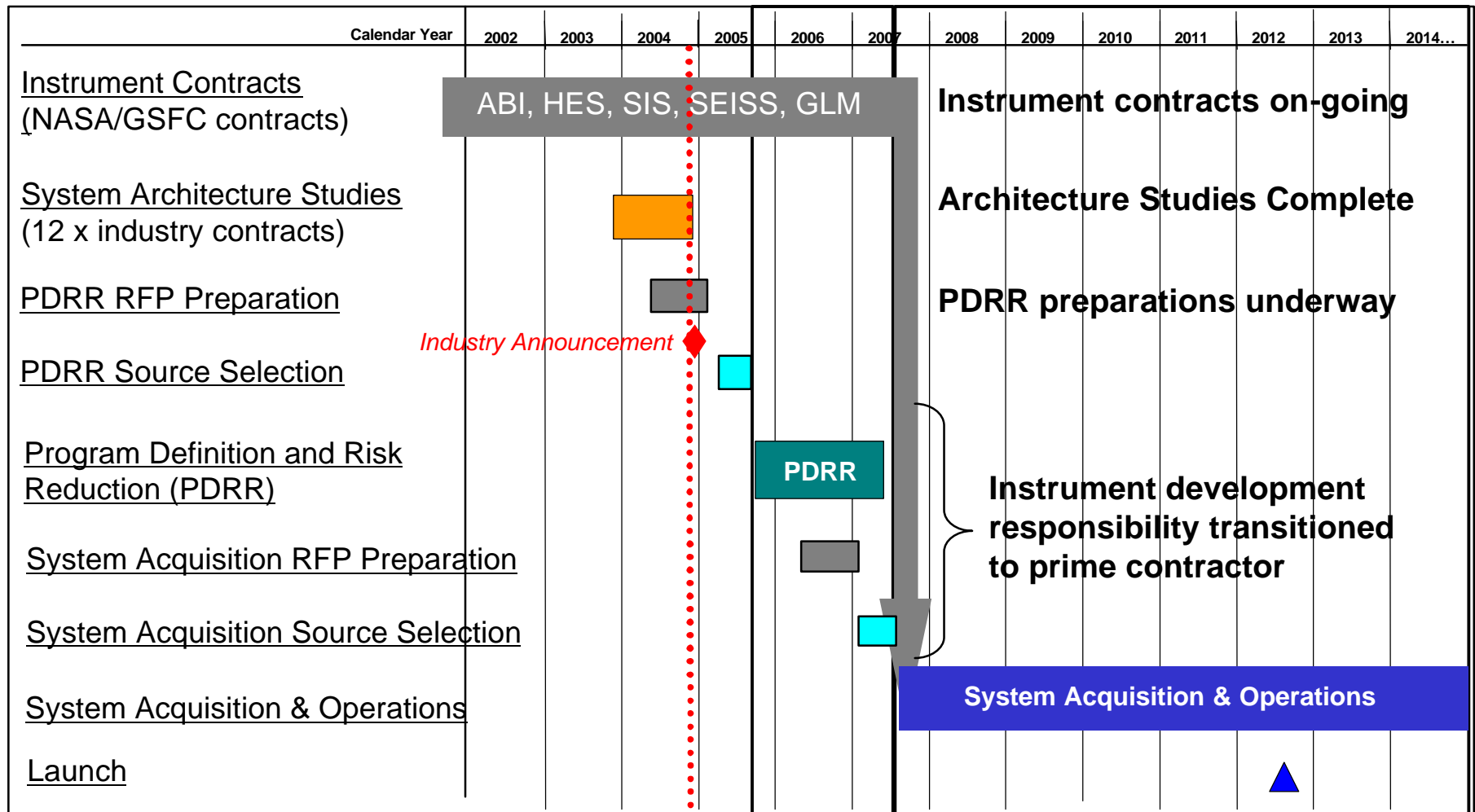
Prime PDRR

Prime PDRR

System A&O

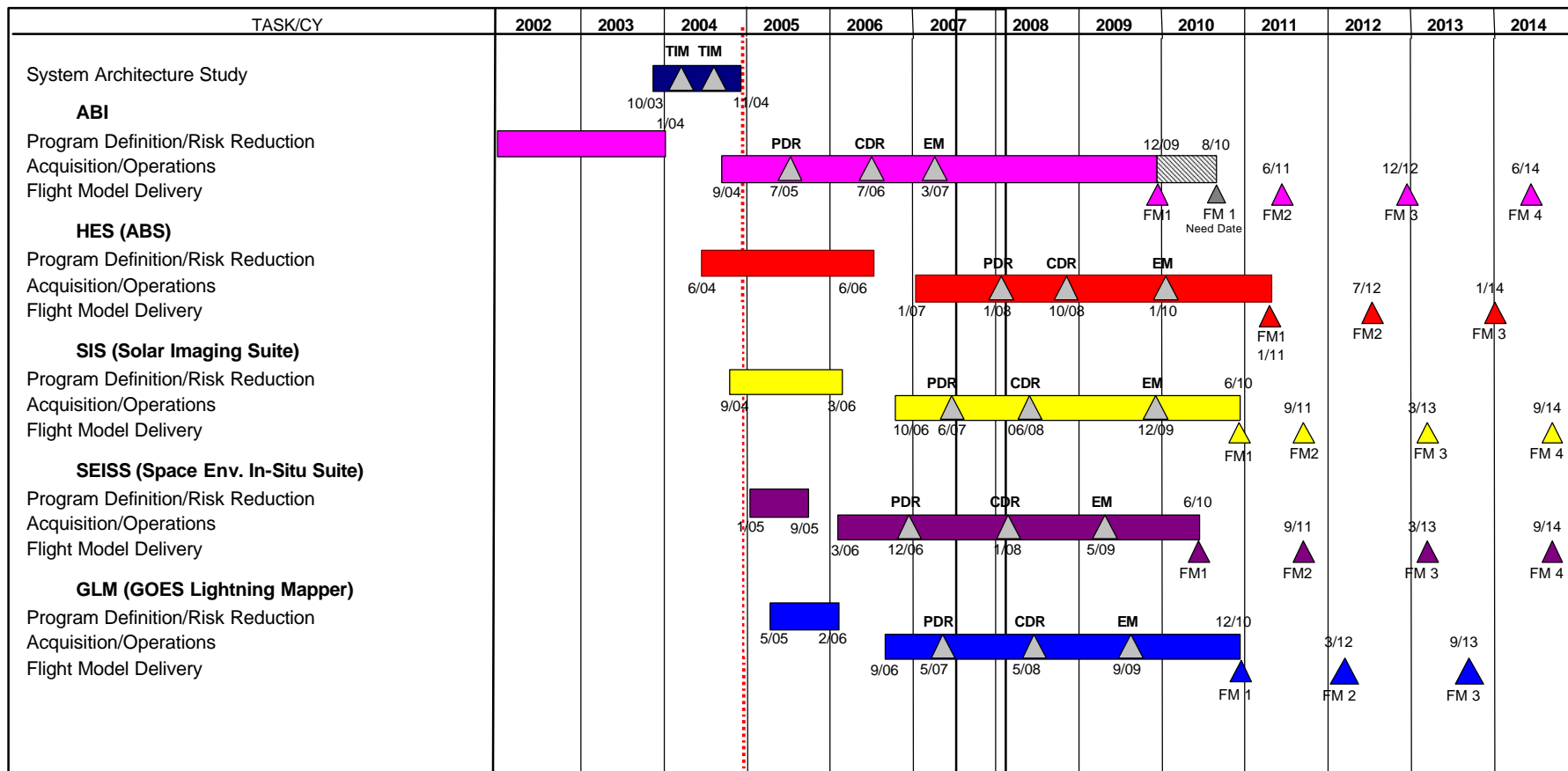


GOES-R Master Schedule





Detailed Instrument Schedules



Instrument transition details in work



System PDRR Acquisition Approach



- Up to three contractors at up to \$20M/each for 12 month base effort
 - Includes System Requirements Review (SRR) and System Concept Review (SCR)
- Up to three options at up to \$10M/each for an additional 10 month contract extension
 - Continue system development through Interim Preliminary Design Review (IPDR) at 6 months
 - Include IPDR oral presentation delivered with A&O proposal
- Fixed price contracts



Statement of Objectives



- A draft Statement of Objectives (SOO) is being provided for industry comment subsequent to this review
- SOO provides the GOES-R system, program, and Program Definition and Risk Reduction (PDRR) Phase objectives
 - SOO is provided in lieu of a Statement of Work for this effort
- PDRR phase objectives described by the SOO include:
 - Generation of an MRD-compliant System Architecture
 - Definition of specific PDRR trade studies
 - Plan for an effective transition of instrument activities to the prime contract
 - Development and refinement of a program Life Cycle Cost Estimate (LCCE)



Requirement Documents



- Government manages mission need level requirements via the GOES-R Performance Requirements Document (GPRD)
- Government manages and controls system level mission performance requirements via the Mission Requirements Document (MRD)
 - Requirements are specified with thresholds and goals
 - Takes precedence over all requirements documents
- GPRD and MRD are program requirement documents for SRR and SCR
- Government anticipates using the MRD as the top level requirements document for the A&O phase



Concept of Operations



- A draft GOES-R Concept of Operations (CONOPS) is being provided for industry comment subsequent to this review
- The CONOPS is intended to provide an operational context for the GOES-R system
- The CONOPS is an evolving document and will be tailored as the system design matures throughout the developmental life cycle
- CONOPS development will occur with the support of the following NESDIS operational organizations:
 - Office of Satellite Operations (OSO)
 - Office of Satellite Data Processing and Distribution (OSDPD)
 - Office of Research and Applications (ORA)



Government Reference Architecture



- The Government is developing a Government Reference Architecture (GRA) to:
 - Interpret GOES-R requirements as delineated in the MRD
 - Estimate life cycle costs and develop program budgets
 - Identify potential technical and programmatic risks
- The GRA is an update and extension of the Notional Baseline and is **not** the Government recommended solution
 - Portions of the GRA description will be provided as part of the draft RFP
- PDRR contractors will be expected to define and develop their architecture solutions to meet Government requirements



Trade Studies



- In addition to the normal system development trades, the Government is interested in the following trades:
 - Affordability (cost driver trades)
 - Orbit box size
 - Ground segment primary and remote locations and CONOPS
 - Frequency utilization
 - Data distribution (GFUL and GRB)
 - Launch services (GFE vs Commercial)
 - Infrastructure architecture and interfaces
 - Instrument management transition options
 - Operations and support approach



GOES-R Risk Watch List

Program Level



Risk	Contributing Factor(s)	Mitigation Focus
System Integration	<ul style="list-style-type: none">• Complexity of end-to-end system• Large number of system interfaces (space/ground segments)• Development of five new instrument systems	<ul style="list-style-type: none">• Multiple System Level Program Definition and Risk Reduction contracts• Single prime contractor responsible for all spacecraft, instrument and ground interfaces• Prime contractor incentivized to focus on end-to-end system performance• Early initiation of instrument contracts
Requirements creep	<ul style="list-style-type: none">• Length of developmental cycle	<ul style="list-style-type: none">• Early definition of a configured Mission Requirements Document (MRD) with traceable flowdown from GOES-R Program Requirements Document (GPRD)• NOSC provides focus for analyzing future requirements• Early establishment of CM baseline
Instrument and algorithm delivery schedule	<ul style="list-style-type: none">• Incorporation of technology advances in focal plane arrays , cryo-cooling and optical distortion correction• 4X increase in GOES products requiring an early emphasis on algorithm development	<ul style="list-style-type: none">• Early competitive contracts for development of instruments and algorithms (i.e. early ABI A&O phase initiation)• Multiple Instrument Program Definition and Risk Reduction contracts (ABI, HES, GLM, SIS and SEISS)• HES-Lite (GIFTS) EDU technology transfer• Early ORA involvement as Gov't IPT lead



GOES-R Risk Watch List Space & Launch Segment



Risk	Contributing Factor(s)	Mitigation Focus
Instrument pointing requirements	<ul style="list-style-type: none">• Contributing errors from instrument and spacecraft, e.g. larger aperture, greater mass, thermal gradients	<ul style="list-style-type: none">• Formal trade defined for PDRR• System prime manages end-to-end pointing error budgets (instrument-spacecraft-ground) and perform trades leading to best solution• Investigation of advanced ranging options (i.e. GPS, artificial landmarks, etc.)• Investigation of low-thrust methods for momentum management to reduce pointing recovery time
Instrument mass/volume growth	<ul style="list-style-type: none">• State of the art technologies in use for the primary instruments for optical, thermal and focal plane components	<ul style="list-style-type: none">• Independent FFRDC support contractor analyses.(i.e. Aerospace CDC modeling, MIT/LL studies)• Lightweight optical assembly development for ABI• HES-Lite (GIFTS) EDU technology transfer• Evaluating additional risk reduction, e.g. GPP
Space to ground comm link	<ul style="list-style-type: none">• Increase in data rates by a factor of >60• Spectra availability	<ul style="list-style-type: none">• Independent FFRDC support contractor analyses.(i.e. data compression and modulation techniques)• Formal trade defined for PDRR• Early filing with NTIA; L and X-band trades• Possible move of western mission from 135° W to 137° W



GOES-R Risk Watch List

Ground Segment



Risk	Contributing Factor(s)	Mitigation Focus
Science algorithm conversion to operational code	<ul style="list-style-type: none">• Over 160 GOES-R products (up from ~41 products today) requiring coding and extensive testing and validation	<ul style="list-style-type: none">• Prime contractor responsibility with strong government IPT involvement (NESDIS/ORA)• Government supplied test data sets used for end-to-end simulation/validation
External User Interfaces	<ul style="list-style-type: none">• Large number of government, private, commercial and academic users	<ul style="list-style-type: none">• Emphasis on early and on-going Industry and GOES User conferences, e.g. Direct Readout Conference• Development of CLASS capability• Formal trade defined for PDRR• Early release of GOES-R CONOPS• Trade to investigate rebroadcast via GOES vs. alternative means (terrestrial, domsat, etc.)



Completed Architecture and Risk Mitigation Studies



GOES-R Architecture Studies

- Mission Sensor Reliability Requirements for Advanced GOES Spacecraft (genesis of improved distributed reliability)
- Multiple government Space Segment Architecture Studies using the Concept Design Center (CDC) at Aerospace Corp., e.g. thirteen configurations study
- Twelve system architecture studies with industry



Completed Architecture and Risk Mitigation Studies (cont.)



Technology/Risk Mitigation Studies

- Analysis of Spectral/Temporal Sampling: Implications for Sounding with HES/ABI
- Particle Detector Testing
- Novel Detector Technology and Applications for GOES
- Coded Aperture Imaging Evaluation
- Green Visible Channel Study

Communications Studies

- Possible Future Enhancements to DCPR
- Data Compression and Modulation Techniques



Baseline Systems Operations Strategy



- Government led operations
- Support approaches need to be studied
 - Communications support
 - Sustaining engineering
 - Hardware/software refresh



Baseline Algorithm Development Strategy



- Level 1B algorithms are the instrument contractor responsibility
- Level 2 and beyond operational algorithms are the system prime responsibility
- Government will support algorithm development by:
 - Providing existing and new algorithms
 - Brokering inputs for new algorithms from within the government and from industry and academia
- System prime is ultimately responsible for the success of operational algorithms for product production



Baseline Product Software Development Strategy



- Software development for product processing will be a collaborative process between the system prime and Government
- System prime responsible for developing product software
- Government will support product software development by:
 - Providing test data sets and algorithms
 - Supporting algorithm selection
 - Serving in an algorithm verification and product validation role
- Government responsible for developing merged products (outside GOES-R system scope) and interface processing



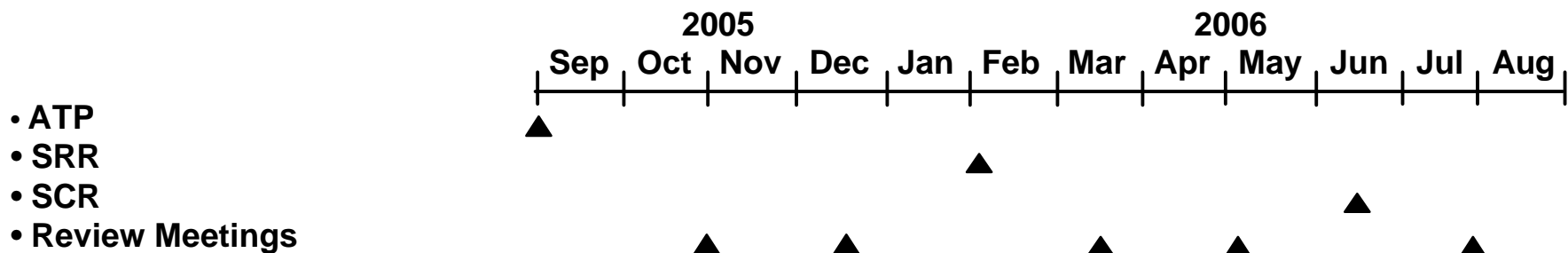
Government Vendor Interaction



- Those firms with Government contracts for developmental pieces of GOES-R, such as instruments and algorithms, are expected to be comparably available to all potential PDRR prime contractors
 - As an example, an exclusive teaming arrangement between a PDRR prime contractor and a NASA instrument vendor (such as ITT for ABI) will not be permitted
- Such firms who desire to participate in the PDRR Acquisition beyond the scope of their existing GOES-R contracts will be required to submit organizational conflict of interest mitigation plans to the NOAA GOES-R contracting officer



PDRR Schedule



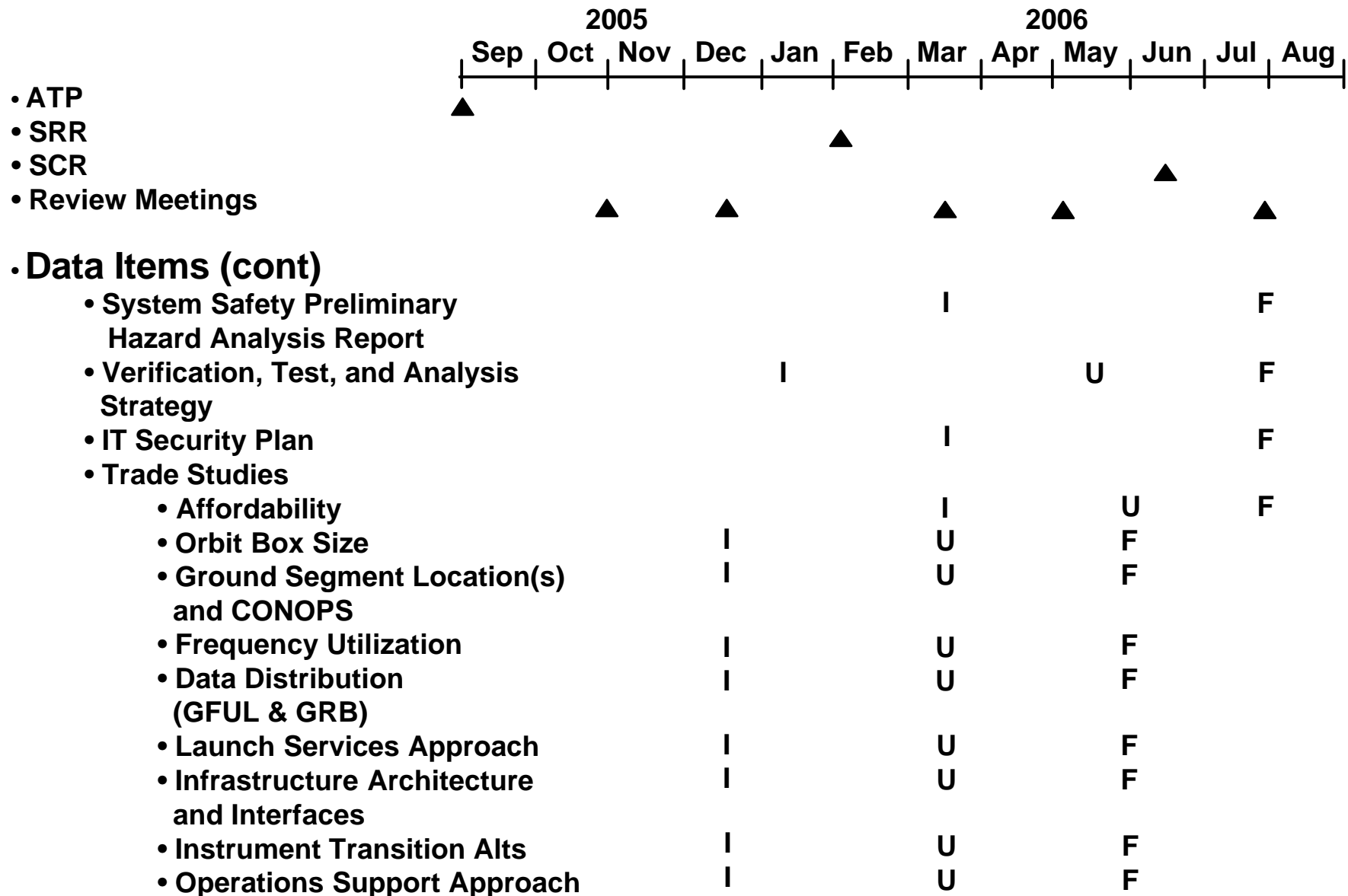
• Data Items

P – Preliminary, I – Initial, U – Update, F - Final

	Monthly Updates											
• Integrated Master Schedule	Monthly Updates											
• Life Cycle Cost Report	P - Format											
• Contractor WBS	P - Format											
• A&O Integrated Master Plan	P - Format											
• A&O Integrated Master Schedule	P - Format											
• Performance Specification	I											
• SRR Design Review Data Pkg	▲											
• SCR Design Review Data Pkg	▲											
• Risk Management Plan	I											
• Software Architecture	I											
• Software Development Plan	I											
• Logistics Management Info Summaries	I											
• Payload Transition Management Plan	I											
• System Safety Program Plan	I											



PDRR Schedule (Cont.)





Draft Basis for PDRR Awards



- FAR Subpart 15.3 is the guide for our source selection
- Our goal is to select up to three offerors that offer best value solutions for PDRR in preparation for the future A&O phase
- Draft evaluation factors and subfactors:

Factor 1—MISSION CAPABILITY

Factor 2—PROPOSAL RISK

Factor 3—PAST PERFORMANCE

Factor 4—PRICE

Subfactor 1—Architectural Concepts

Subfactor 2—Program Definition
& Risk Reduction

Subfactor 3—Risk Mitigation

Subfactor 4—Systems Engineering
& Program Execution



Draft Schedule of Near Term Events



- Industry Day Dec 13, 2004
- Second Release of Draft Documents Dec 30, 2004
- ARB Jan, 2005
- Draft RFP Release Jan 31, 2005
- KDP B Feb, 2005
- Final RFP Release mid-Mar 2005
- Proposal Delivery (45 days) early-May 2005
 - Past Performance volume mid-Apr 2005
- Source Selection Apr – Sep, 2005
 - Mid term brief/discussions Jun, 2005
 - Final Proposal Revision Jul, 2005
- Award Sep, 2005



Transition to A&O Phase



- One or more PDRR options may be exercised following delivery of SCR in 4QFY06
- A&O RFP may be released after SCR completion
 - Source selection “black out” period begins
 - Program office team will disengage from PDRR contractors following delivery of SCR
 - All communications go through contracting officer
- Up to 3 system prime contractors continue working PDRR option though Interim PDR



Transition to A&O Phase (Cont.)



- A&O proposals received just prior to IPDRs
 - A&O source selection begins
- IPDR results presented to program office as A&O proposal oral presentations
- PDRR contract wraps up while program office finishes the A&O source selection

Mitigates schedule risk by continuing critical system development towards PDR and maintaining industry team during A&O RFP



A&O Acquisition Phase Approach



- Single Prime Contractor
 - Responsible for end-to-end system performance
 - Will obtain responsibility for instrument contracts
 - Manages all interfaces and integration within system
- Cost Plus Award Fee/Mission Success Fee
 - Refines design development
 - Delivery of system to satisfy IOC requirements
 - Remaining instruments development and integration
 - Interim contractor support for launch, early orbit & checkout, and operations
- Fixed Price, Award Fee/Mission Success Fee
 - Production of remaining operational satellites



Industry Day Agenda



- | | | |
|---------------------------------|------------------------------------|-------------|
| • Admin and Agenda | J. Inman | 1:00 – 1:05 |
| • Welcome and Introduction | J. Kelly
G. Withee
E. Weiler | 1:05 – 1:30 |
| • Rules of Engagement | J. Inman | 1:30 – 1:45 |
| • GOES R Program Overview | S. Kirkner | 1:45 – 2:00 |
| • Instrument Acquisition Status | M. Donnelly | 2:00 – 2:15 |
| • Acquisition Strategy | M. Crison | 2:15 – 3:30 |
| • Communication | J. Inman | 3:30 – 3:45 |
| • Closing Remarks | M. Crison | 3:45 – 4:00 |



Next Steps



- Answers to industry questions: We reserve the right to post responses to topics that are of universal interest
- We anticipate hosting one-on-one meetings with potential prime offerors after the January draft PDRR RFP is released
 - We hope the draft RFP cycle will be robust, with helpful comments coming from industry
 - Comments on the GPRD, SOO, CONOPS, and MRD are invited by January 10, 2005
 - Comments on the December 30 draft documents are invited by January 18, 2005



Industry Day Agenda



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Points of Contacts



- Acting Contracting Officer
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